

DAVID HOOPER

1858—1947

BY

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DAVID HOOPER was born at Redhill, Surrey, in 1858 and was educated at Chelmsford, to which town his parents moved shortly after his birth. In 1887 he married Miss Hannah Carr Evans, a daughter of the Reverend Thomas Evans, a Baptist minister of Mussoorie, U.P., India, who survives him with three daughters. His two sons pre-deceased him, the elder being killed on active service in France in 1915. Hooper died on January 31st, 1947, at Bromley, Kent, and was buried in Islington Cemetery.

In 1878 Hooper was awarded the Herbarium Bronze Medal presented annually by the Pharmaceutical Society of Great Britain for the best herbarium collected during the year by a pharmaceutical apprentice. This early interest in plants remained with him to the end of

his long life, and, though he regarded himself as a chemist, he might with equal accuracy have been described as an economic botanist. In 1880, as a student at the Pharmaceutical Society's School, he qualified as a pharmaceutical chemist and distinguished himself by winning the Pereira Medal, the highest award the Society can offer to a pharmaceutical student. He then spent three years in the laboratories of pharmaceutical firms in London, gaining experience in the analysis of natural drugs, which was of great value to him in his later career. In 1884 he was appointed quinologist to the Government of Madras, and spent six months in Holland studying records of cinchona planting in Java and Dutch methods of quinine manufacture, before proceeding to Ootacamund, Madras, to take up his official appointment, which he retained until 1896. The first half of the latter year he was Officiating Government Botanist and Director of Cinchona Plantations in Madras, and in the second half he did duty as Officiating Reporter on Economic Products to the Government of India, a post he held again in 1898—99 and 1905. In 1902 he was also for a time Officiating Government Chemist. His own post during this period, 1897—1914, was that of Curator of the Economic and Art Section of the Indian Museum, and the fact that he was so frequently seconded to act for scientific colleagues is a tribute to his versatility and his profound knowledge of plants and their constituents. On his retirement in 1914 he returned to England, and during the first World War was engaged in supervising chemical work under the Ministry of Munitions. After 1919 he worked for a time in the biochemical laboratory at Bristol University. His last important task was the botanical investigation of native drugs and plants from South-Western Asia. The material studied included three collections, one made by Drs. Cowan and Darlington in 1929 (*Kew Bulletin*, 1930, pp. 49—68), a second in 1929 and subsequent years by Captain P. Johnston-Saint of the Wellcome Historical Medical Museum, and a third by Mr. Henry Field, leader of the Field Museum Anthropological Expedition to the Near East in 1934. The results of this study were published by Hooper, Field, and Dahlgren as "Useful Plants and Drugs of Iran and Iraq" (*Field Museum of Natural History, Botanical Series*, 1937, No. 3, pp. 71—241). No new drugs or plants were found, but, like most of Hooper's papers, this one illustrates his flair for eliciting curious, interesting, and suggestive information.

Though Hooper was a prolific writer he published comparatively little original laboratory work, and that was mainly of an analytical type on the constituents of plants alleged to be of therapeutic value or to serve some other useful purpose. There are many papers arising out of his work as a quinologist, including in 1884 a series of analyses of cinchona barks of historical interest, a favourable commentary on the polarimetric method for the analysis of commercial quinine sulphate—a subject on which there was at the time (1886) much discussion among quinologists—and a review of cinchona cultivation in Java from 1872 to 1907. Several papers deal with the work and problems of a quinologist in the Madras Cinchona Plantations and discuss the yields of alkaloid from different species of *Cinchona* and their hybrids, and the effects on yield of age and of variation in conditions of cultivation and harvesting. These papers contain the results of hundreds of analyses of cinchona bark and bear tribute to the industry and scientific enthusiasm of the young quinologist. Mention may also be made of his isolation of the alkaloid vasicine from *Adhatoda vasica*. It was subsequently found by the late Professor Späth in *Peganum harmala* and shown to be of a new type based on a quinazoline nucleus.

Hooper's chief service to science lies in his industrious and meticulously careful collection, arrangement, and publication of information regarding the origin, composition, and uses of plants, especially drugs. He published many notes and papers on such subjects in the *Pharmaceutical Journal*, the *Agricultural Ledger of India*, and the *Journal of the Asiatic Society of Bengal*. His most important work of this kind is his share in "Pharmacographia Indica," a three-volume work prepared in association with two Indian Army surgeons, Drs. Dymock and Warden. Each Indian drug is the subject of an erudite monograph, which includes original medical or chemical observations by the authors. So little chemical work has been done on the constituents of plants that this book published 55 years ago is still useful as a guide in the selection of plant material for chemical investigation. It contains, for example, useful information on *Dichroa febrifuga*, *Dæmia extensa*, *Alangium Lamarckii*, and other plants which have recently been the subject of chemical investigation, as part of what seems to be a minor revival of interest among chemists in the constituents of plants.

Hooper's work was recognised by the award to him of the Hanbury Gold Medal in 1907, of which two previous recipients, Sir George Watt and Dr. Dymock, were his associates in India. In 1914 he was given the honorary degree of LL.D. by the McMaster University of Toronto, and in 1916 he was President of the British Pharmaceutical Conference. He joined

the Chemical Society in 1883; he was also a Fellow of the Royal Institute of Chemistry and of the Linnean Society, and an honorary member of several foreign pharmaceutical associations.

Hooper was a man of untiring industry, and his modesty and pleasant manner won him many friends at whose disposal he was always ready to place his time and his unique knowledge.

He was all his life a total abstainer and an earnest evangelical Christian deeply concerned with all causes making for the moral and spiritual welfare of mankind. He met his future wife while associated with her father in work for the Union Church at Ootacamund, and on his retirement he spent much time in service to religious organisations in the various localities in which he lived.

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